

Work Order ID 154284***154284***

Page 1

Wednesday, December 07, 2016 1:50:42 PM

Item ID: 644.4119

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Spacer. Fwd Stop

Start Date: 12/9/2016 Start Qty: 14.00

14

Cust Item ID:

Required Date: 12/23/2016 Req'd Qty: 14.00

14

Customer:

Reference:

DAS
21
9-89

Approvals: Process Plan:

Date: DEC 07 2016

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

644.4100

F2

110

0.00

110

HAAS CNC VERTICAL MACHINING #1

Lathe Conv

Memo

0.29

Conventional Lathe

1-TURN AS PER DWG

DWG REV: F

2- deburr and break all sharp edges

120

0.00

120

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.19

Quality Control

DAS
32
9-89

16-12-12

DAS
32
9-89

16-12-12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
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Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.05

Quality Control

14

4

DAS
45 16-12-12
9-89

140

Outsource process-Anodize per QSI017 4.1.10.1

0.00

140

Outsource4

Memo

139.99

Outsource process - Anodize

Issue P/O to ATG :

34644

1- Black Anodize as per Dwg
Note 4

Certification of Conformity is required

14

DEC 15 2016

DAS
13
9-89

150

Receive & Inspect for Damage & Mat'l Certs

0.00

150

Packaging

Memo

0.05

Packaging

14x SP/6-12-22

DQA: _____ Date: _____



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Work Order ID 154284

Wednesday, December 07, 2016 1:50:42 PM

154284

Page 3

Item ID: 644.4119

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N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Spacer, Fwd Stop

Start Date: 12/9/2016 Start Qty: 14.00

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Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

155

QC5- Inspect part completeness to step on W/O

0.00

155

QC

Quality Control

QC6

Memo

0.05

16-12-22

DAS
9
9-89

160

0.00

160

SprayPaint

Spray Painting

Memo

PRIME AS PER DWG AND NOTE 4
BATCH: 136429

0.00

14

17-01-31

PAINT AS PER DWG AND NOTE 4
BATCH: 136434

165

QC14- Inspect Spray Paint

0.00

165

QC

Quality Control

Memo

0.00

14

DAS
38
9-89
FEB 01 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

Identify as per dwg & Stock Location: CK 131

0.00

180

Packaging

Memo

0.02

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

14

DAS
6
9-89

FEB 01 2017

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.23

Quality Control

17/02/02 JH

FEB 02 2017

DQA: _____ Date: _____



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Picklist Print

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Page 1

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154284

Parent Item: 644.4119

644 4119

Parent Item Name: Spacer. Fwd Stop

Start Date: 12/9/2016

Required Date: 12/23/2016

Start Qty: 14.00

Required Qty: 14.00

Comments: IPP REV:A NEW ISSUE 16-12-06 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R1.125		Purchased	No				f	21.5000		0.736842			
									**				
DAS 32 9-89													
16-12-12													

M6061T6R1 125

6061 ROUND BAR 1.125

Location

Loc Qty

Loc Code

MAT012

21.5

112697

1.5

m130070

20

1.188'

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coor. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Root Cause <table style="width:100%; border: none;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="width:25%;">Pressure/Forced ☐</td> <td style="width:25%;">Temperature/Cure ☐</td> <td style="width:25%;">Power Loss/Surge ☐</td> <td style="width:25%;">Positioned Wrong ☐</td> </tr> <tr> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
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		OTHER : ☐																																																																					

INSPECTION SHEET

Rev	Date	Change	Revised by	Approved
B	14.07.31	New Issue	KJ	

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 04489

SHEET 1 OF 1

DWG NO. 644.4100

REV: F

PREPARED BY: J. BECKER

DATE: 04/08/14

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: PIVOT STEP ASSY

APPROVED BY:

ENGR

MFG

QC

EFF:

NEXT ORDER

TRANSACTION
A-ADD
R-REVISE

CODES (TC)
C-CREATE
D-DELETE

REASON: UPDATE NOTE 4, FINISH SPECIFICATION.

NOTES:

1. IDENTIFY ALL PARTS IN ACCORDANCE WITH MPP-120
2. MATERIAL: 2024-T3 ALUMINUM
3. MATERIAL: 6061-T6 ALUMINUM
4. FINISH IAW MPP-172 SECTION 2.1, SECTION 3.1, SECTION 4.1, SECTION 5.2.
5. MATERIAL: MDS-FILLED NYLON 6/6 SHEET, CUT OD CIRCLE USING 2" GASKET PUNCH, CUT ID HOLE USING 1/4" GASKET PUNCH
6. MATERIAL: MDS-FILLED NYLON 6/6 SHEET, CUT OD CIRCLE USING 2" GASKET PUNCH, CUT ID HOLE USING 5/16" GASKET PUNCH
7. DIMENSION VALUE HAS FINISH COATING OF 6-10 MIL (.006-.010) TAKEN INTO CONSIDERATION
8. ADD ADDITIONAL WASHER UNDERNEATH CASTLE NUTS IF NECESSARY.
9. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK.

SHOP COPY
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154284 MJS
16-12-D7

SHEET 1, NOTES IS:

DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☐ BOM

CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☐ YES ☒ NO

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04286

SHEET 1 OF 1

DWG NO. 644.4100

REV: F

PREPARED BY J. SOTO

DATE: 12/04/2013

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: PIVOT STEP ASSY

APPROVED BY:

ENGR

[Signature]

MFG

[Signature]

QC

[Signature]

EFF.

NEXT ORDER

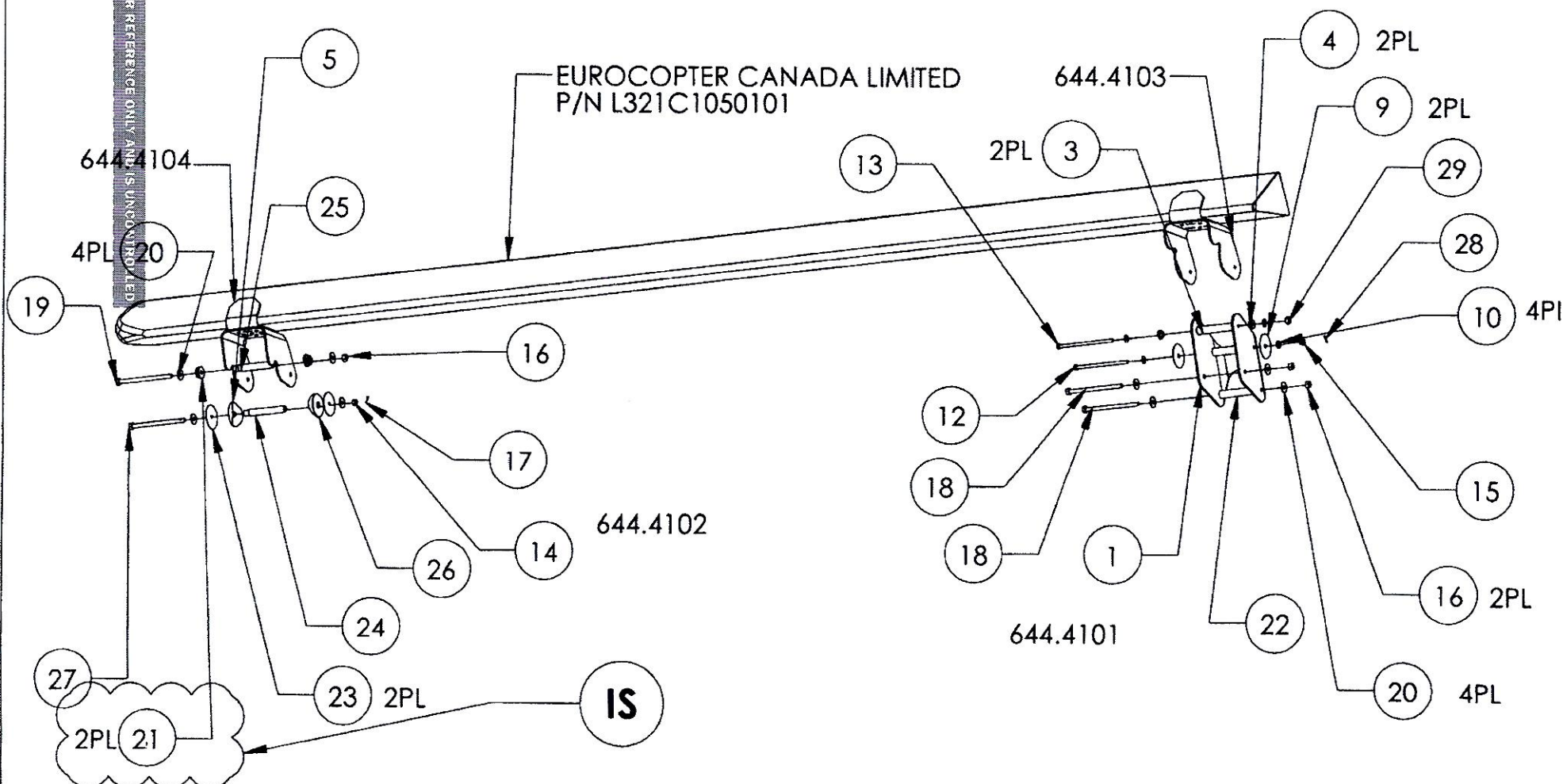
TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

REASON: REVISED F/N CALL OUT FROM 22 TO 21

ECR:

13-151

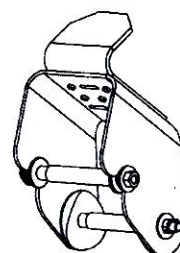
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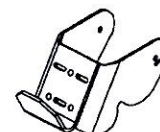
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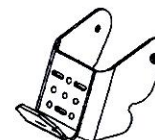
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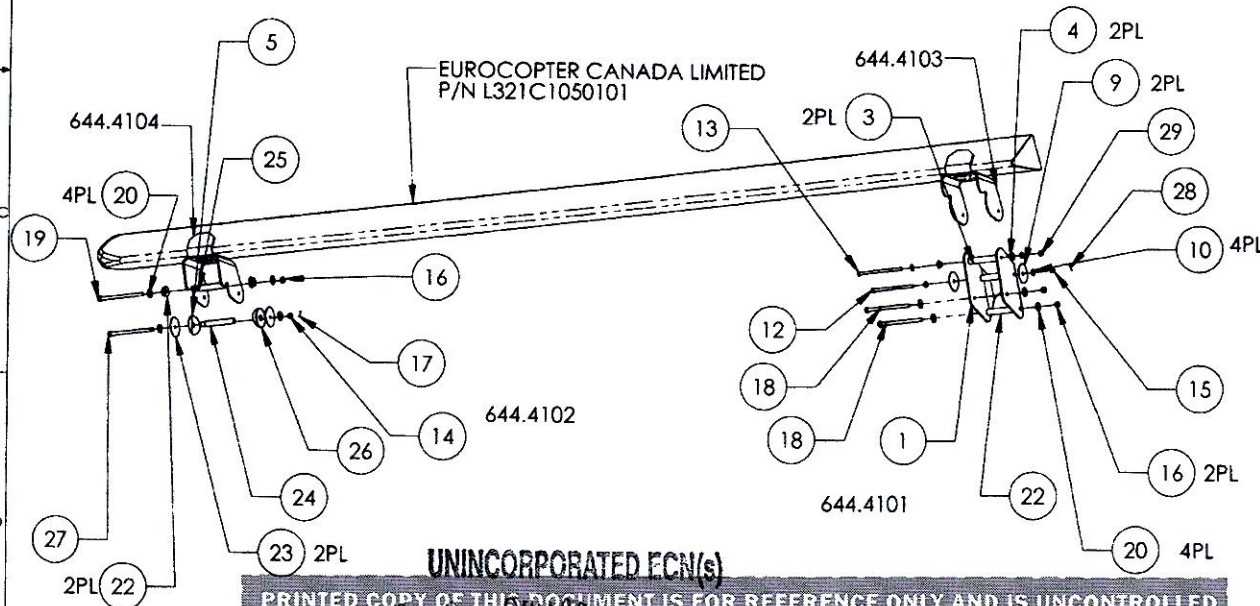
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644.4103



644.4104



UNINCORPORATED ECN(s)

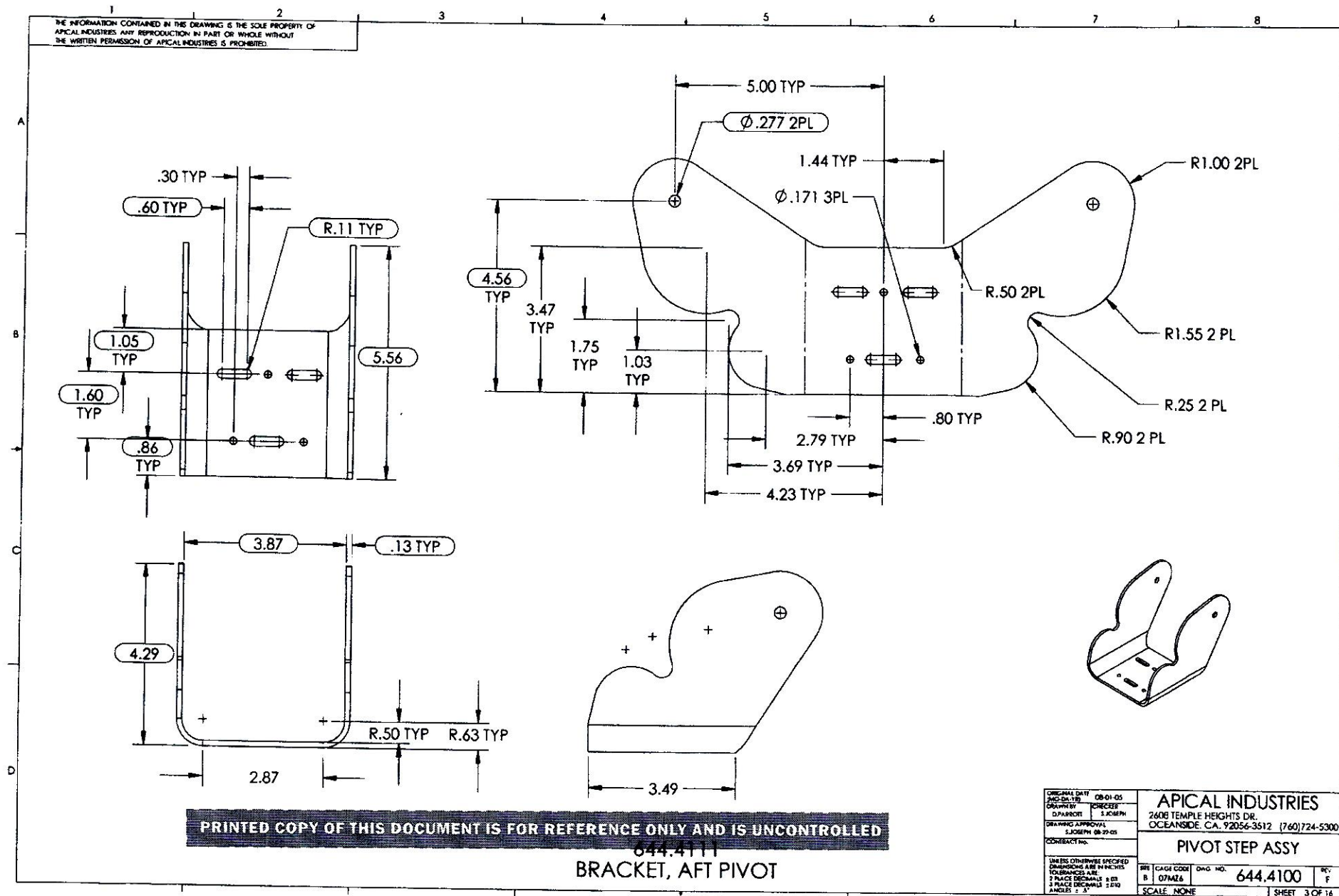
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REVIEWS			
REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECH 01310, 01322, 01332 & 01357.	11-22-65	S. JOSEPH
B	INCORPORATED ECH 01472, 01488, 01799, & 01836.	05-21-67	P. BRAVO
C	INCORPORATED ECH 01988, 02336, 03022	12-16-70	P. BRAVO
D	INCORPORATED ECH 03111, 03113, 03308, & 03740	12-10-72	P. BRAVO
E	INCORPORATED ECH 03941	05-18-73	P. BRAVO
F	INCORPORATED ECH 40001	2-29-73	P. BRAVO

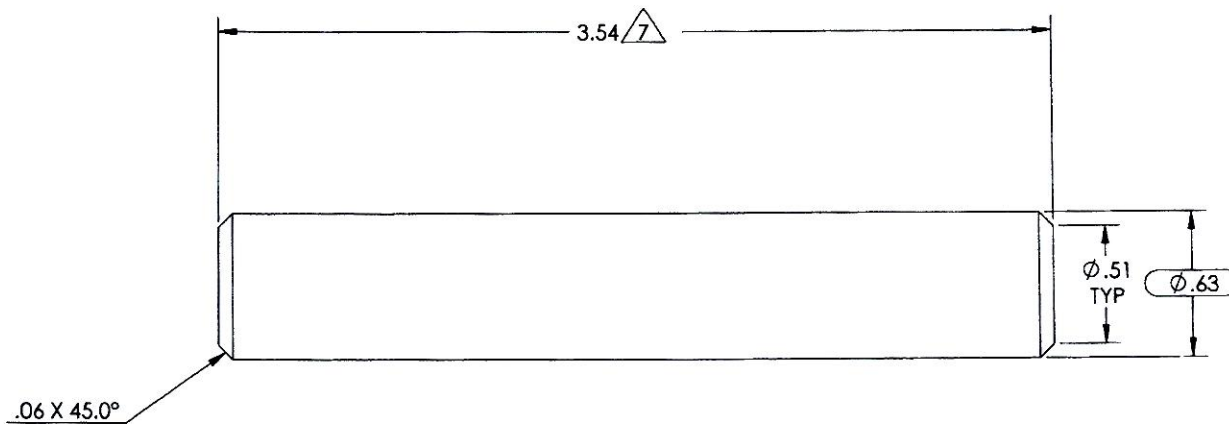
		1	29	601.3273	LOCKNUT FULL	MS21044AN-4		
		1	28	601.2640	COTTER PIN	MS24665-13Z		
		1	27	601.2328	BOLT, HEX	ANS-45		
		1	26	644.4124	WASHER, PIVOT	A A		
		1	25	644.4123	FWD CROSS-TUBE BUSHING	A A		
		1	24	644.4122	FWD CROSS-TUBE BUSHING	A A		
		2	23	644.4121	WASHER, NYLON	A A		
		1	22	644.4120	SPACER, CROSS-TUBE	A A		
		2	21	644.4119	SPACER, FWD STOP	A A		
		4	20	601.2110	WASHER, FLAT THICK	NAS114PC 05A3R		
		1	19	601.2250	BOLT, HEX	ANS-50		
		2	18	601.2249	BOLT, HEX	ANS-43A		
		1	17	601.3315	COTTER PIN	MS24665-210		
		1	2	16	601.3272	LOCKNUT FULL	MS21044NS	
		1	15	601.1435	NUT, HEX CASTLE FULL	ANS10-G-4		
		1	14	601.3270	NUT, HEX CASTLE FULL	ANS10-S		
		1	13	601.3407	BOLT, HEX	ANA-47A		
		1	12	601.2434	BOLT, HEX	ANA-45		
6	3		11	601.2326	RIVET, COUNTERSUNK	MS2024GADS-B		
		4	10	601.0863	WASHER, THICK	NAS114PC 04B3R		
		2	9	644.4118	WASHER, NYLON	A A		
		8	8	644.4117	BRACKET, FWD PIVOT	A A		
		7	6	644.4116	BRACKET (SMALL), FWD	A A		
		6	644.4115	BRACKET (SMALL), AFT	A A			
		1	5	644.4114	WASHER, PIVOT	A A		
		2	4	644.4113	SPACER, STOP	A A		
		3	3	644.4112	SPACER	A A		
		i	2	644.4111	BRACKET, AFT PIVOT	A A		
		1	1	644.4110	BRACKET [LARGE], AFT	A A		
X		1		644.4104	FWD BRACKET ASSY			
		1		644.4103	AFT BRACKET ASSY			
				644.4102	PIVOT STEP ASSY			
				644.4101	PIVOT STEP ASSY			
4104	4103A	4102	102	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
				QTY		PARTS LIST		
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 9724-530								
PIVOT STEP ASSY								
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .010 3 PLACE DECIMALS ± .005 ANGLES ± .5°								
REV CAGI CODE DMC MD B 07MZE SCALE: NONE SHEET 1 OF 1								
644.4100								

ORIGINAL DATE (MO-DA-YR)	08-01-05	APICAL INDUSTRIES 2408 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)9724-5300	
DRAWN BY	JOHNCHIE		
CHECKED BY	J. JOSEPH	PIVOT STEEL ASSY	
DRAWING APPROVAL	J. JOSEPH		
CONTRACT NO.		SET (PAGE CODE) DWG. NO. 644.43 REV. F B 07/26/06 DATE NAME SHEET 2 OF 16	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. FRACTIONS: .005 2. PLACES DECIMALS: .005 3. PLACES DECIMALS: .005			

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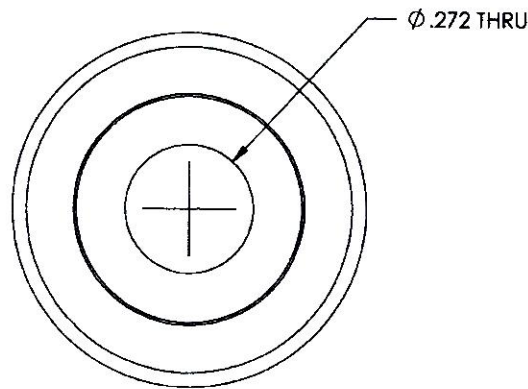
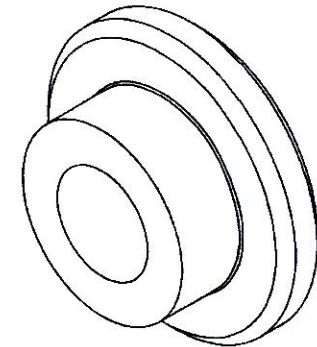
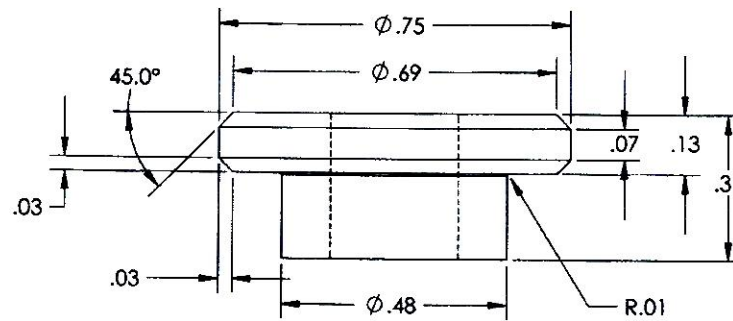


644.4112
SPACER

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ORIGINAL DATE 06-01-05	APICAL INDUSTRIES		
DRAWN BY CHECKER	2608 TEMPLE HEIGHTS DR.		
DRAWING APPROVAL S. JOSEPH	OCEANSIDE, CA. 92056-3512 (760)724 5300		
CONTRACT NO.	PIVOT STEP ASSY		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .03$ 3 PLACE DECIMALS $\pm .010$ ANGLES $\pm .5^\circ$	SERIAL B	CAGE CODE 07M26	DWG. NO. 644.4100
			REV. F
	SCALE NONE	SHEET 4 OF 16	

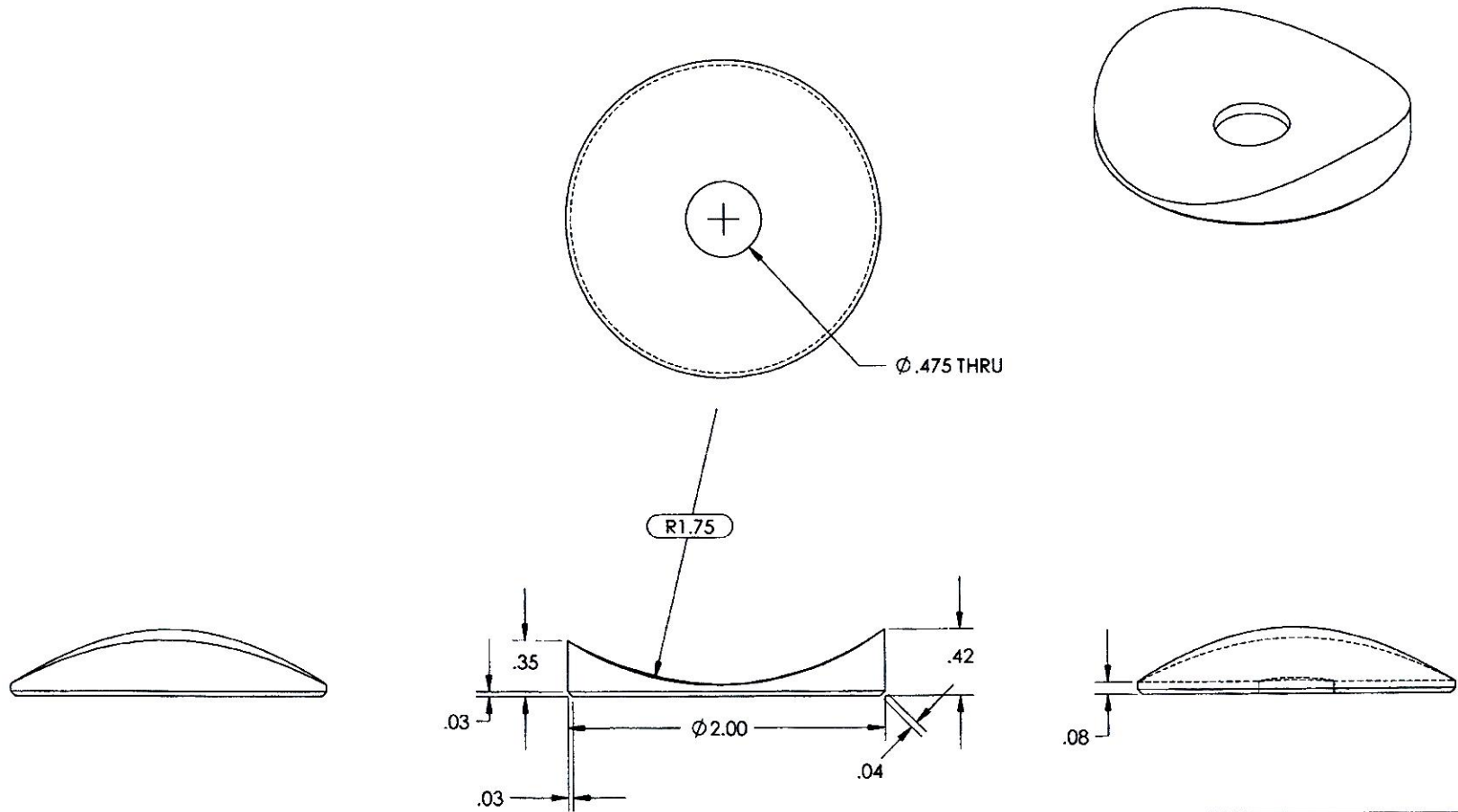
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SPACER, STOP

ORIGINAL DATE	08-01-05	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300					
DESIGNED BY	CONCERN						
DRAWING APPROVAL	S. JOSEPH 08-21-05	PIVOT STEP ASSY					
CONTRACT NO.							
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .02$ 3 PLACE DECIMALS $\pm .010$ ANGLES $\pm 5^\circ$		SERIAL	CAD/CAM	DWG. NO.	644.4100	REV.	F
		SCALE		NONE	SHEET 5 OF 16		

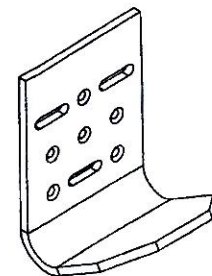
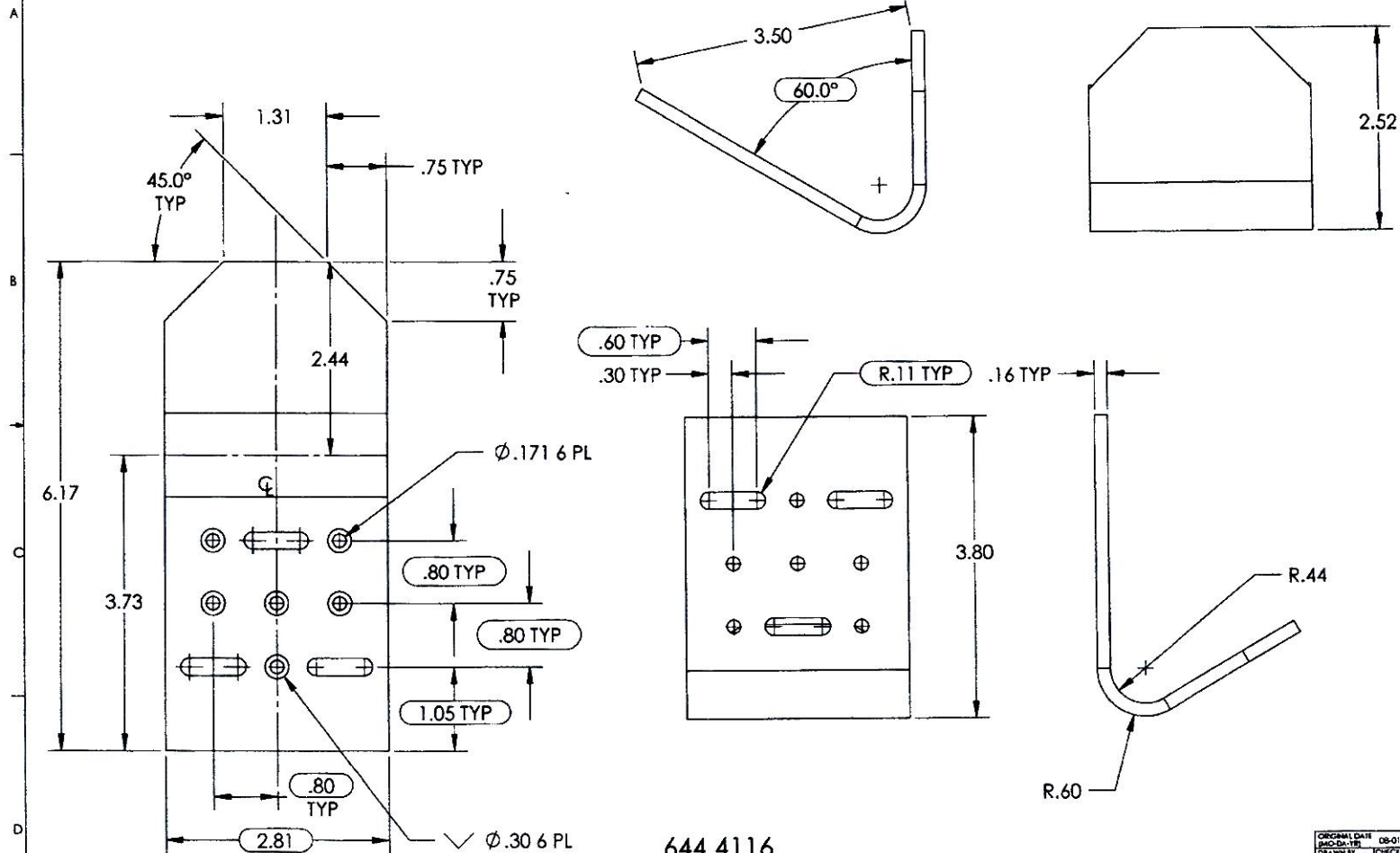
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ORIGINAL DATE: 08-01-05		APICAL INDUSTRIES	
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D. PARICHI		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: [SIGNED]		PIVOT STEP ASSY	
DATE: 08-29-05		SCALE: NONE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.010 ANGLES ±.5°		SHEET: 6 OF 16	REV: F

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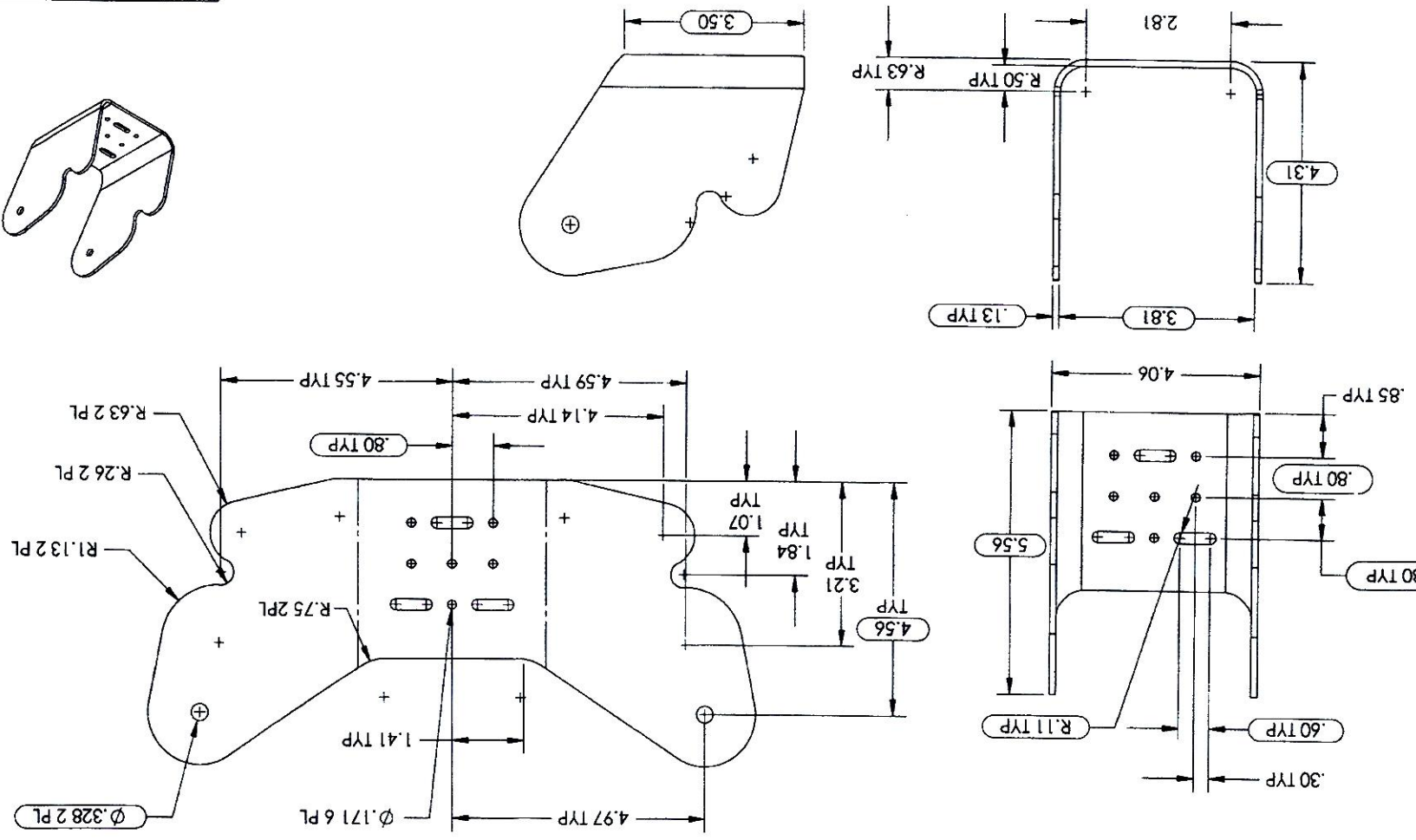
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644.4116

BRACKET (SMALL) FWD

ORIGINAL DATE 08-01-05	APICAL INDUSTRIES
DRAWN BY D. HARRIS	2608 TEMPLE HEIGHTS DR.
CHECKED BY S. JOSEPH	OCEANSIDE, CA. 92056-3512 (760)724-5300
DATE 08-29-05	PIVOT STEP ASSY
CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.03 3 PLACE DECIMALS ±.010 ANGLES ±.5°	REV. F
SCALE: NONE	SHEET 8 OF 16

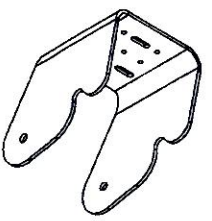
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BRACKET, FWD PIVOT

APICAL INDUSTRIES	OCANAIDE, CA 92056-3512 (760) 724-5300	DATE: 08-01-03	DESIGNER: J. LORIN	DRAWING APPROVAL: J. LORIN	CONTRACT NO: 100899-00-000	SCALE: NONE	SHEET: 9 OF 16
PIVOT STEP ASSY	644.4100	REV: F	REV: B	REV: A	REV: C	REV: D	REV: E



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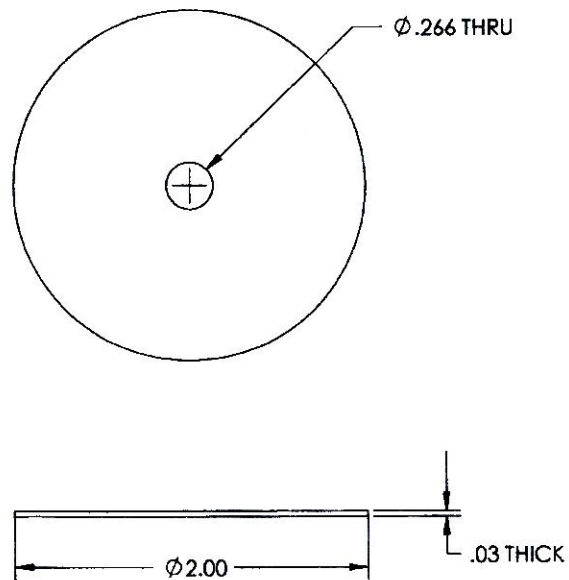
A

B

C

D

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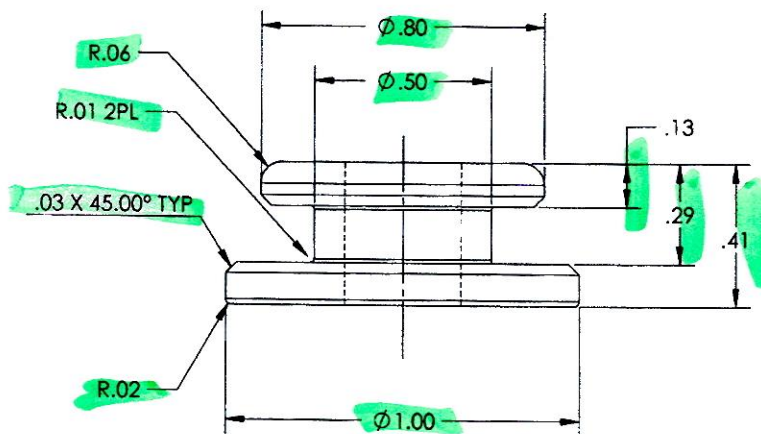
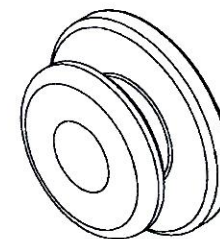
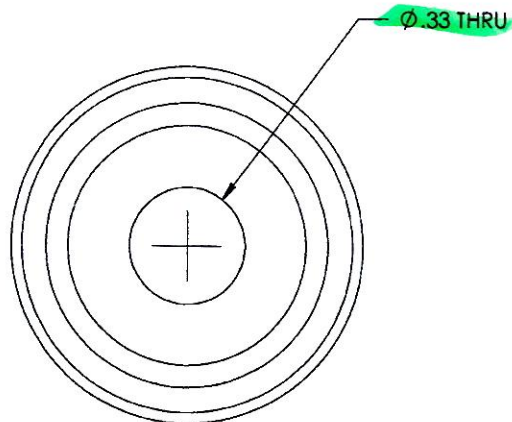


644.4118
WASHER, NYLON

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ORIGINAL DATE 08-01-05	APICAL INDUSTRIES		
DRAWN BY J. HARRIS	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3612 (760)724-5300		
DRAWING APPROVAL J. HARRIS 08-29-05	PIVOT STEP ASSY		
CONTRACT NO.	SHEET B	CAGE CODE D7M26	DWG. NO. 644.4100
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .03$ 3 PLACE DECIMALS $\pm .010$ ANGLES $\pm .5^\circ$	SCALE NONE		SHEET 10 OF 16

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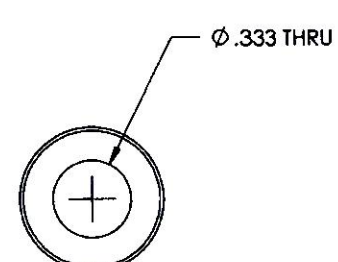
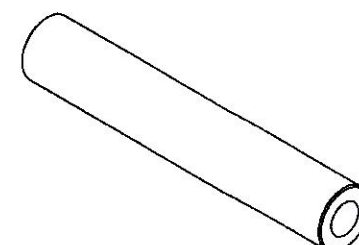


644.4119
SPACER, FWD STOP

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ORIGINAL DATE: 08-01-05		APICAL INDUSTRIES	
DRAWN BY: CHECKER		2608 TEMPLE HEIGHTS DR.	
DRAWN BY: J. JOSEPH		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: J. JOSEPH 08-29-05		PIVOT STEP ASSY	
CONTRACT NO.		REV. F	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.03 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SER. CAGE CODE: 07M26	DWG. NO. 644.4100
SCALE: NONE		SHEET 1 OF 16	

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Ø.333 THRU

3.54 $\triangle 7$

Ø.59 Ø.62

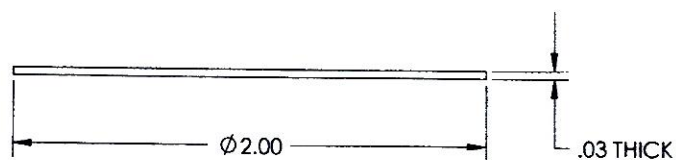
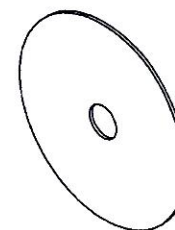
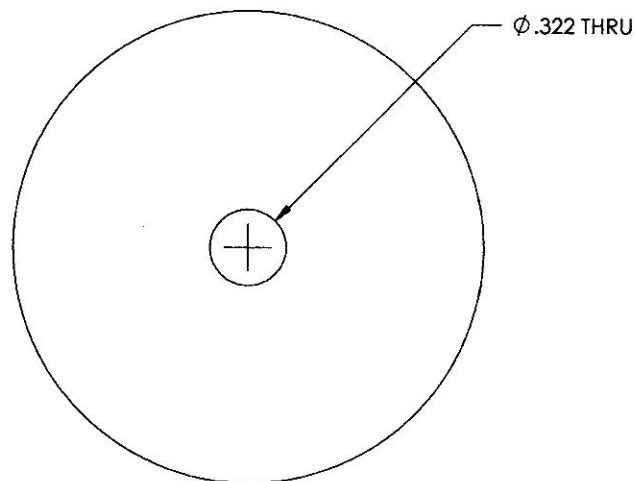
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644.4120
SPACER, CROSS-TUBE

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ORIGINAL DATE 08-01-05	APICAL INDUSTRIES	
DRAWN BY D. PARSONS	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
CHECKED BY S. JOHNSON	PIVOT STEP ASSY	
DRAWING APPROVAL S. JOHNSON 08-24-05		
CONTEXT OF INFO.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°	REV. (CASE CODE) 8 07M16	DWG. NO. 644.4100
SCALE: NONE	SHEET 12 OF 16	

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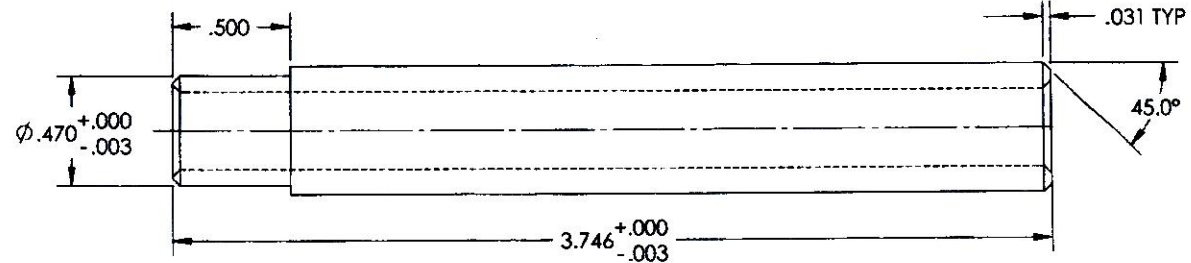
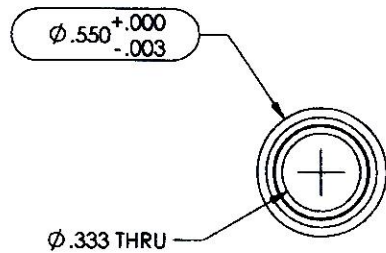
644.4121

WASHER, NYLON

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ORIGINAL DATE 08-01-05		APICAL INDUSTRIES	
DRAWN BY 07/01/05		2608 TEMPLE HEIGHTS DR.	
CHECKED 07/01/05		OCEANSIDE, CA 92056-3512 (760)724-5300	
DRAWING APPROVAL 08-29-05		PIVOT STEP ASSY	
CONTRACT NO.		REV. F	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET 8	OF 16
SCALE NONE		644.4100	

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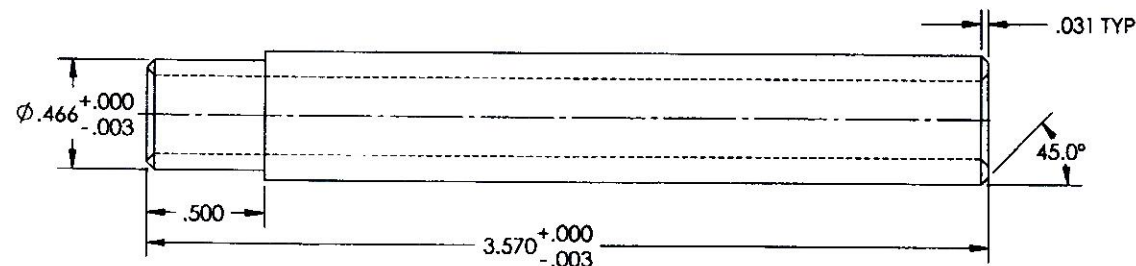
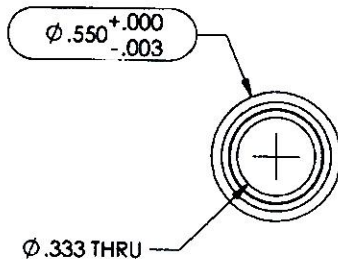


644.4122

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ORIGINAL DATE: 08-01-05		APICAL INDUSTRIES	
DESIGNED BY: J. JOSEPH		2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL: J. JOSEPH 08-29-05		OCEANSIDE, CA. 92056-3512 (760)724-5300	
CORRECTIONS:		PIVOT STEP ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.003 2 PLACE DECIMALS ±.005 ANGLES ±.5°	SHEET: B	CAGE CODE: 07MA26	DWG NO: 644.4100
SCALE: NONE		SHEET: 14 OF 14	

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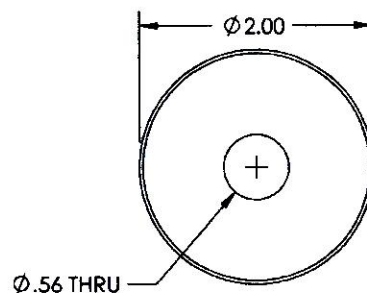
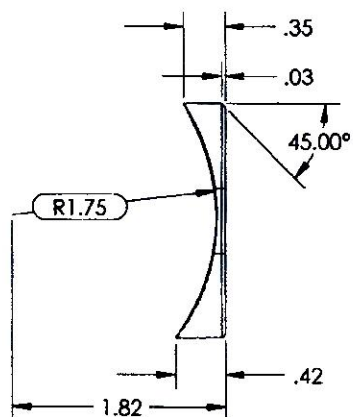


644.4123

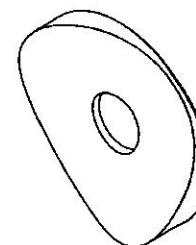
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ORIGINAL DATE 08-01-05		APICAL INDUSTRIES	
DRAWN BY D. FAIRBORN		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL L. JOSEPH 08-29-05		PIVOT STEP ASSY	
CONTRACT NO.		REF.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.02 ANGLES ±.5°		SER. B	CAGE CODE 07MA26
		DWG. NO. 644.4100	REV. F
		SCALE NONE	SHEET 15 OF 16

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644.4124



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ORIGINAL DATE: 08-01-05		APICAL INDUSTRIES	
DESIGNED BY: J. JOHNSON		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. JOHNSON		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: 08-29-05		PIVOT STEP ASSY	
CONTRACT NO.		REV. 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS: ±.010 ANGLES: ±.5°		REV. 1	REV. 1
REV. 1	CAGE CODE: B 07ME6	DWG. NO. 644.4100	REV. 1
SCALE: NONE		SHEET 16 OF 16	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO34644

Purchase Order Date 12/15/2016

PO Print Date 12/21/2016

Page Number 5 of 7

Order From : VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 613-446-4544

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

12	154272	644.4120 SPACER REV. F2	12/22/2016	7.00	\$4.95	\$34.65
			Yes			
			12/22/2016			
FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE 3 CLASS 2, COLOR BLACK						

Line Total: \$34.65

13	154284	644.4119 SPACER REV. F2	12/22/2016	14.00	\$3.30	\$46.20
			Yes			
			12/22/2016			
FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE 3 CLASS 2, COLOR BLACK						

DAS 9-89

Line Total: \$46.20

14	154282	644.4113 SPACER REV. F2	12/22/2016	14.00	\$3.00	\$42.00
			Yes			
			12/22/2016			
FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE 3 CLASS 2, COLOR BLACK						

Line Total: \$42.00

PO Instructions: PRIMER IS SUPPLIED BY DART

Note:

12/21/2016



A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 912727

Date: 20-Dec-16

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

CHANTAL LAVOIE
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
	PLEASE REFERENCE THE PACK LIST NUMBER ON ALL CORRESPONDENCE TO THIS SHIPMENT. IF YOU HAVE ANY QUESTIONS, PLEASE CALL AT (613) 446-4544.		
7 ea	Part: 644.4122 Bushing Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20512	Rev: F2 PO: PO34644	Line: 11
7 ea	Part: 644.4120 Spacer Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20513	Rev: F2 PO: PO34644	Line: 12
14 ea	Part: 644.4119 Spacer Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20514	Rev: F2 PO: PO34644	Line: 13
14 ea	Part: 644.4113 Spacer Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20515	Rev: F2 PO: PO34644	Line: 14
14 ea	Part: 644.4112 Spacer Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20516	Rev: F2 PO: PO34644	Line: 15
50 ea	Part: D1038-58B Rail Black Anodize per MIL-A-8625F, Type II, Class 2 Job: 20517	Rev: B PO: PO34644	Line: 16
2	Part: D5046-041	Rev: B	



A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 912727

Date: 20-Dec-16

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

CHANTAL LAVOIE
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
ea	Co-pilot Black Anodize per MIL-A-8625F, Type II, Class 2 Job: 20518 PO: PO34644 Line: 17		
DATE: 20/12/16			
CERTIFIED SIGNATURE: [Signature]			
RECEIVER SIGNATURE: [Signature]			
Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
CERTIFICATE OF CONFORMANCE			
A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT CONFORM TO REQUIREMENTS.			
MADE IN CANADA.			